

perfectly matches the available facts” (Brachet, 1942, p. 239, as quoted in Rasmussen, p. 60).

As he was completing the ribonuclease research, Brachet and his student Hubert Chantrenne began a collaboration with biochemist Raymond Jeener in which they isolated particles similar to those Claude had identified as microsomes using a prototype of Emile Henriot’s air-driven centrifuge. They called these “cytoplasmic particles of macromolecular dimension” (Brachet & Jeener, 1944) and claimed that nearly all cytoplasmic RNA was located in them, together with several hydrolytic or respiratory enzymes. They also speculated that the hydrolytic enzymes could be caused to work in reverse through the energy released by the respiratory enzymes in order to synthesize peptide bonds.

World War II had a substantial impact on Brachet and his research program. The Germans, occupying Belgium, closed Brussels University in 1942 and Brachet was arrested and imprisoned for nearly three months.⁷ He briefly resumed work in Liège until Allied bombing made this impossible. During this hiatus from research, he wrote an overview of chemical processes in development entitled *Chemical Embryology*. After the war, Brachet reestablished his laboratory, although under difficult financial circumstances,⁸ in small houses at the university’s botanical gardens on the outskirts of Brussels. Relatively quickly, he reassembled his network of collaborators. Chantrenne was appointed professor of biochemistry and he and Brachet continued to investigate RNA metabolism during protein synthesis, the effects

⁷ Brachet describes the period: “The interdiction, made by the Germans in 1942, to all members of the staff to enter any more the University laboratories obliged us to stop that sort of work; a difficult, but successful, task was the hiding of all the laboratory equipment, including the instruments given by the Rockefeller Foundation in 1938. A search was made for some of these American instruments by the Germans, but they were not to be found. They are of course in constant use in the laboratory now. My arrestation as an hostage and imprisonment in a fortress for 2½ months, followed by a 3 months necessary rest after my release, meant a long interruption of my work in 1943” (Report of activity since 1940, folder 38, box 4, Series 707D, RG 1.2, Rockefeller Foundation Archives, RAC).

⁸ Brachet at this time seriously considered emigrating, but concluded that the prospects for improved conditions were sufficient not to pursue that option. He reported in a summary to the Rockefeller Foundation, “As a matter of fact, Brussels University has recently been backing me as far as it can: a new technician has just been appointed in the laboratory and money (10,000 frs) has been given with the purpose of getting a larger ultracentrifuge in working order; it is likely that ultracentrifuge studies will be resumed in a few weeks. The University is also intending to build new laboratories, where I shall find my place among chemists and physicists; the Board of Trustees has also accepted my proposal of the creation of the ‘groupement d’études de biologie physicochimique’, which will help in tightening the links between biologists, chemists and physicists” (Report of activity since 1940, folder 38, box 4, Series 707D RG 1.2, Rockefeller Foundation Archives, RAC).